

the computer program listing. Applicants state that a microfiche appendix will also be submitted upon notice of allowance.

In paragraph eight of the Office Action, claims 1-6 were rejected as being unpatentable over Kinney et al. (U.S. Patent No. 4,001,460) in view of either Mathiesen et al. (WO 95/17657) or Didenko et al. (U.S. Patent No. 6,013,438). The Office Action states that Kinney et al. discloses an automated system for processing a tissue sample. Further, the Office Action states that Kinney et al. fail to disclose that the control device regulates the flow of fluid in the claimed sequential flow as recited in the claims. The Office Action further states that the Mathiesen and Didenko references both disclose methods of fixing specimens in paraffin which include a deparaffinization step so as to remove the paraffin and further process the specimen with stain and/or further reagents. The Office Action thereafter concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kinney et al. so as to provide both the disclosed fixing procedure and the deparaffinization steps disclosed by the secondary references for the result of automating the deparaffinization steps with an automated system.

Applicants do not believe, and the references cited in the Office Action confirm, that applicants' automated reprocessing has been previously conceived. Rather, the Office Action states that the prior art directed to processing of tissue samples renders the current invention obvious. Applicants do not believe that the current invention, as claimed, is obvious due to a long-felt need for the invention. Processing of tissue samples using embedding media has been in existence for decades. Moreover, the problems associated with the tissue sample processing,

such as the need to reprocess tissue samples, have also been present for a significant amount of time. However, the reprocessing of tissue is time-consuming and requires care to be performed properly. Applicants recognized this specific problem, as stated in applicants' specification:

there may be instances where the specimen may be processed incorrectly, due to contamination of reagents during processing or inadequate fixation. It is typically not until after the specimen has been embedded and sliced that it can be determined whether the specimen has been properly processed. At that point, there are two options: obtain another specimen or reprocess the embedded specimen. If one chooses to reprocess the sample, this involves sequentially immersing, exposing or subjecting the specimen with a series of reagents under controlled conditions. However, this process is very time-consuming and requires a technician to manually proceed through each of the reprocessing steps.

Further, there are instances where a slice or a cross-section of a specimen, after being processed, will be reprocessed for analysis. One instance is ploidy analysis in which tissue sections are cut from the paraffin block, wrapped in a permeable material and reprocessed. The reprocessing steps remove the paraffin using a clearing agent, remove the clearing agent using a dehydrant and remove the dehydrant using an aqueous medium. Nuclei from the specimen are then prepared for DNA analysis using a fluorescent compound.

Page 3, lines 9-23 of the specification. In the face of this clear and long-standing need, applicants invented a method and apparatus for automatically reprocessing tissue samples. The invention allows for the tissues to be reprocessed, without the waste of a technician's time and with a higher likelihood that the tissue will be reprocessed properly. Therefore, applicants believe that this long-felt need clearly indicates that the invention is nonobvious. *See CSS International Corp. v. Maul Technology Co.*, 16 U.S.P.Q.2d 1657, 1666 (S.D. Ind. 1989), *aff'd*, 17 U.S.P.Q.2d 1873 (Fed. Cir. 1990)(unpublished).

**CONCLUSION**

If for any reason an interview would be helpful to resolve any remaining issues, the Examiner is requested to contact the undersigned attorney at (312) 913-0001.

Respectfully submitted,

**McDonnell Boehnen Hulbert & Berghoff**

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By: Amir N. Penn

Amir N. Penn  
Reg. No. 40,767  
Attorney for Applicant